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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ZIMMER, MARC S

ART UNIT PAPER NUMBER

1712

DATE MAILED: 12/19/2002

15

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/685,341

Applicant(s)

JENKNER ET AL.

Examiner

Marc S. Zimmer

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 29,30 and 39-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29,30,43 and 44 is/are allowed.
- 6) ☒ Claim(s) 39 and 41 is/are rejected.
- 7) ☒ Claim(s) 40 and 42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413) Paper No(s) 13.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**Response to Amendment**

In view of Applicant's cancellation of amended claims 23-28, the finality of the Examiner's rejection is hereby withdrawn.

At the behest of the Examiner, Applicant has amended claim 29 to eliminate the product-by-process language, "organosiloxane based composition... prepared by the controlled hydrolysis of" as a means of avoiding the references cited *vida infra*. (The Examiner explained that, if claim 29 was to be rewritten as a two-step process claim wherein the first step entailed the preparation of said composition and the second step involved applying the composition to a filler, than the process limitations associated with the preparation of the organosiloxane could not be ignored. That is, these limitations would no longer be immaterial to a determination of patentability. By contrast, claim 29, as it reads in the submission dated June 4, 2002, is essentially drawn to a method of silanizing filler that essentially involves applying a fluoralkyl-substituted polysiloxane to the surface of a filler wherein the organosilicon product is prepared by the controlled hydrolysis sequence delineated therein. In the Office's view, these are not equivalent claims despite their notable similarities.)

The Examiner also suggested that Applicant could write new claims containing the same limitations as cancelled claims 23, 25, and 27 using the same strategic language employed in twice-amended claim 29. Accordingly, Applicant has added new claims 39-44 drawn to the utilization of the perfluorinated organosiloxane formed by the controlled hydrolysis process of the instant invention as coating materials for the substrates identified in amended claims 23, 25, and 27.

Art Unit: 1712

The Examiner had indicated in the telephone interview conducted on December 9, 2002 that the amendments discussed would place the application in condition for allowance. However, an English language equivalent of a foreign reference that had appeared not to satisfy all of the limitations of the present invention was discovered subsequent to this conversation. Upon reading the English-language equivalent, it was determined that this document did, in fact, satisfy all of the process limitations of at least some of the claims. The Examiner sincerely regrets any inconvenience this may have caused.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 39 and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Akamatsu et al., U.S. Patent # 6,337,133. Akamatsu discloses a method for producing a water repellant glass pane that involves hydrolyzing/condensing any of the perfluoroalkyl-functionalized silanes mentioned in column 3, lines 49-52 in a lower alcohol such as those mentioned in column 3, lines 56-62. An aqueous solution of either strong- (hydrochloric, nitric) or weak (acetic) acids functions as a catalyst in the

Art Unit: 1712

formation of the coating product from the alkoxysilane starting material. These acids are available as aqueous solutions and it is this water that serves as the water of hydrolysis (column 4, lines 6-13). Silane and catalyst are stirred together in the alcohol/water medium for at least 1.5 hrs according to column 4, line 26-30. In the Examples, the temperature at which this reaction step is carried out is room temperature. As for claim 41, insofar as many buildings are at least partially, or even completely, comprised of glass panes, claim 25 is also anticipated.

***Allowable Subject Matter***

Claims 40 and 42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 29-30 and 43-44 are allowed. Akamatsu makes no mention of glass fibers or inorganic filler as substrates of interest nor would it have been obvious to employ the composition taught by Akamatsu to coat these materials.

Evans et al., U.S. Patent # 4,529,774 is cited as being germane to claim 29 as they recommend coating silica with a fluoroalkyl group-substituted polysiloxane to facilitate their admixture in fluorine-substituted polymers. However, Evans employs chlorinated silanes as starting materials for preparing the perfluorinated organopolysiloxanes whereas alkoxy-substituted silanes are polymerized in the currently claimed processes. There is no specific motivation in the art to replace the chlorosilanes disclosed by Evans with alkoxysilanes hence the claims are allowable over Evans. Maxson, U.S. Patent # 5,302,632 describes the utilization of perfluorinated

Art Unit: 1712

silicones as coating reagents for silica but there are no instructions as to how the coating materials are made disclosed therein. Diener et al. discloses a filler coating method using perfluoroalkylated trialkoxysilanes as the treating agent. The silane is used directly with no preceding hydrolysis step.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 703-605-1176. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on 703-308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

December 11, 2002



Robert Dawson  
Supervisory Patent Examiner  
Technology Center 1700